

REMARKS/ARGUMENTS

The Examiner rejected claims 1-17 as being unpatentable over U.S. Patent No. 310, 255 to Cook in view of U.S. Patent No. 5,528,778 to Shrock et al. The Examiner states that Cook discloses "a seating" that is basically the same as that recited in claims 1-17 except that the main supporting member lacks seat and back frames, as recited in the claims. The Applicant disagrees with the Examiner's 35 U.S.C. 103(a) obviousness rejection and requests the Examiner place Claims 1-17 in allowance.

In the foregoing action, the Examiner attempts to combine the teachings in the Cook reference with those of Shrock et al. It would not be obvious to one skilled in the art to combine the subject matter of Cook and Shrock et al.

This invention relates to folding seats used in automotive vehicles. Cook, as the teaching reference, discloses a bed that can be folded into a casing. The main supporting member B is pivotally connected to the casing A, which acts as the fixed support. The casing consists of a bottom C, upright ends D, top or mantel E and a back G. The main supporting member is connected to upright ends by rod K. The rod K passes through the casing and supports the rear of the frame. The present invention is a seat-bed assembly comprised of a seat and back portion. The main supporting member or frame 18 is pivotally mounted by brackets 16 to a wall 14, which allows the frame to remain immovable, while the seat and back portions are movable.

Another feature of the present invention is that it allows legs to engage the vehicle floor and support the seat-bed. This feature is not novel to folding seats, but legs that can fold independently, with each leg having a separate linkage, is an improvement to prior art. Cook discloses folding legs that support the bed and are folded against the main support member when it is moved to the storage position. The leg (N) is a movable, single piece formed from by a single rod M. This rod M is further connected to an actuating link, P', which is pivotally connected to rod L. Rod L is a fixed auxiliary supporting and stop rod that is parallel to rod K. Rod L is bent downward at its center to form a looped arm, m, and the rod M is bent downward at its center to form a crank, m', which is opposite of the arm m. The actuating link connects the arm m to crank m'. When the crank m' is rotated, the rod M will partially rotate and cause the legs N to turn inward against the sides of the rails J. The present invention uses a different mechanism

to operate the legs. Each leg is pivotally connected to the main support member 18. An actuating link is also connected to the leg at one end and the other end of the link is pivotally connected to the bracket. The actuating link is then pivotally connected to the bracket. This mechanism causes each leg to fold automatically against the frame when the bed is moved to the storage position. As the bed is moved to the storage position, pivot connections between the immovable bracket 16 and the actuating link 24 allow the legs to fold against the main supporting member 18. In contrast, the legs in Cook are a single piece connected to the same actuating link, which connects at the center of the main supporting member. Yet, in the present invention each leg separately connects to a different actuating link. The legs are connected to the outer portion of the frame. No parts of the legs or actuating links are beneath the frame as opposed to Cook, which uses an actuating link that extends underneath the frame.

The Examiner states Shrock et al. shows a seating similar to Cook wherein the seating has a main supporting member 18, a seat frame 70, and a back frame 72 each slidably mounted on the main support member. Further, one would have been motivated to modify in view of the suggestion in Shrock et al. that the relatively moveable seat and back frame allow the seating to move between a seat position and a bed position. The present invention uses a different structure to transition between positions. The vehicle seat in the present invention has three positions that allow it to be used in a seating position, a bed position, and a storage position. The seat position functions by an operating link 48 pivotally connected to the seat back 32 and seat bottom 30. This allows to seat to move to a bed position. In the bed position, seat-bed can be stored vertically against the wall by lifting up the seat frame 34 to pivot toward the wall by an actuating link facilitating the movement and folding the legs at the same time. The teaching reference, Cook, can only be used as a bed or stored in a casing. As disclosed in Cook, when the frame is turned up, its lower side rests against the auxiliary supporting and stop rod, L, which allows the frame to be held in an upright position and prevents it from falling against the wall. Shrock et al. also has two positions, but it can only be used in the bed or seat position; it is not able to be stored in a vertical position. In Shrock et al., a plurality of links that interconnect the seat support and the back support with the frame. The links support the seat support and the back support for movement between

the seat and the bed position. The present invention is not slidably mounted on the main support member. The seat bottom 30 is moveable relative to the seat back 32, as the seat bottom is pulled out or the seat back 32 is pushed down. The sliding movement is accomplished through pivot connection 46 of the two seat portions 30, 32, one causing movement of the other.

Therefore, the Applicant would argue that a person of obvious skill in the art would not combine the cited references and respectfully requests Claims 1-17 be placed in allowance.

The Examiner attempts to combine the teachings of Cook in reference with those of Shrock et al. The cited reference cannot be properly combined. The seat bed disclosed in Shrock et al. 5,528,778 ('778) a portion of the seat 12 that extends beyond the support legs. However, no portion of the bed disclosed in Cook 310,255 extends beyond the supporting legs. As the bed in Cook is folded into the casing, the actuating link, P will depress the crank *m'* of the rod M and partially rotate the rod causing the legs to be turned inward against the side of the rail J. If the sofa bed in Shrock et al. were substituted into the frame of Cook, the main supporting member would pivot from the rod K. Yet, the seat portion 12 would extend past the legs of the frame. Also, the legs in Cook would need to be modified because they support the frame at its edge. Furthermore, when the bed is moved to the storage position, the frame would extend beyond the casing and prevent the seat-bed from being stored.

In the alternative, if Shrock et al. is modified to fit into the Cook, it would still pose a problem. Most likely, the main supporting member of Shrock would need to be shortened in order to fit into the frame of Cook. This would entail adjusting the seat frame 70 of Shrock so that it would not extend beyond the legs of the main supporting member. Even so, after this modification has been made, when the bed is converted to the seat position, the underlying frame would be partly exposed, because the seat portion moves inward as the bed is converted to a seat. Shrock et al. requires a slideable and adjustable frame in order to accommodate the retraction of the bed to a seat. Overall, the substitution of Shrock et al. into Cook does not lend itself to use the same structure without significant modifications.

In summary, it is believed Claims 1-17 are in allowable form.

Respectfully submitted,

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